

# **Arizona Multimodal Freight Analysis**

## **Technical Advisory Committee Meeting Minutes**

### **Wednesday, October 10<sup>th</sup>, 2007 1:30 - 3:30**

3<sup>rd</sup> floor meeting room of the ADOT Administration Building, 206 S. 17th Avenue



#### **TAC Attendees:**

Dianne Kresich, ADOT  
Scott Friedson, ADOT  
Charlene FitzGerald, ADOT  
Mark Meyers, ADOT  
Ken Hall - MAG  
Jermaine Hannon - FHWA  
John Liosatos, PAG  
Al Altuna, PAG  
Sharon Mitchell, SEAGO  
Bill Leister, CAAG  
Dave Barber, WACOG  
Kevin Adam, RTAC

#### **Consultant Staff**

Mark Berndt, WSA  
Pam Keidel-Adams, WSA  
Peter Ogonowski, WSA  
Arno Hart, RNO Group  
Rob Bohannon, Lima Associates

#### **TAC Members Attending by Phone:**

Jodi Rooney, CYMPO  
Dave Wessel - FMPO

#### **Meeting Agenda:**

1. Welcome and introductions
2. Brief overview of progress – where we are
3. Preview of next steps – where we are going
  - Engaging the Private Sector – one-day workshop taught from FHWA
  - Formation of Freight Advisory Committee – attracting members, agency commitment, role in statewide planning
  - Tech Memo 2 – analysis of rail, roadway, and aviation modes
4. Presentation and Discussion – Tech Memo 1
5. Freight data
  - Distribution of CDs
  - Description of data

## **Introductions and Pre-presentation Discussions**

Dianne Kresich, ADOT Project Manager led the introductions and noted that several members were also participating by phone. Dianne also indicated that the meeting had been moved to a smaller room to try and improve the quality of the audio for those participating by conference call - however now the conference speaker phone was malfunctioning and experiencing a high level of reverberation, limiting the number of phone participants.

Dianne gave a brief overview and status of the study effort;

- The study got underway at the end of March;
- This TAC meeting will review Tech Memo #1 - The Arizona Freight Industry Analysis
- Tech memo #2 - the freight infrastructure inventory is nearly complete. While every effort was made to try and complete the document prior to this meeting, it will require an additional TAC meeting.

Dianne also indicated that one of the early suggestions from the consulting team was to consider hosting a workshop offered by FHWA entitled; *"Engaging the Private Sector in Freight Planning."* Dianne then called upon Jermaine Hannon and Mark Berndt to provide additional information about the workshop and gauge the interest among TAC members.

Mark Berndt gave overview of FHWA workshop: The one-day workshop is designed to help state and regional transportation organizations understand how to involve private sector businesses who are dependent on transportation, in the public planning process. "Engaging the Private Sector" is another form of public involvement aimed specifically at freight stakeholders.

Jermaine Hannon indicated that federal legislation requires States and MPOs to do freight planning and involve the private sector. Jermaine suggested that if the workshop is hosted in Arizona, that planning agencies invite members of their public outreach and planning staffs to attend.

TAC members indicated support for an Arizona session of the workshop. Dianne indicated that ADOT will coordinate with Jermaine on the schedule and facilities.

Mark indicated that he was one of the instructors for FHWA and suggested that an Arizona workshop could be structured to assist ADOT and its partners consider a freight advisory committee, including the structure and role an advisory body might play in future freight planning activities. Jermaine added that another FHWA program; the "Freight Peer Exchange" – could be used to hear first hand from other organizations that have assembled and used freight advisory committees in their planning process.

## Other Announcement / Issues

- Dale Buskirk, ADOT Planning Director has announced that he will retire March 8, 2008.
- A question was raised regarding the validity of commodity data from 2005, as the economy was more robust in 2005 than it is currently. The commenter suggested that there has been considerable change in economy of Arizona, and based on recent discussions with trucking companies in Kingman, some carriers have recently laid-off drivers.

Members of the consultant team explained that at the commodity flow data is strongly tied to economic data such as County Business Patterns from the U.S. Census Bureau and that this data historically has a lag of 12 to 18 months. At the time the study began, 2005 commodity data was the most current available. In addition, the purpose of the data is to identify key markets - both source markets for inputs to Arizona's key consumption activities, and export markets (exports beyond Arizona's borders). The other key use of the data is to identify key freight production sectors of Arizona's economy, through the identification of key commodities. It was emphasized that while the economy will experience ups and downs - overall these key markets and production sectors are not likely to change dramatically from year to year.

### **Presentation Tech Memo #1: Analysis of Arizona's Freight Dependent Industries**

**(Note: A copy of the presentation is provided as an attachment)**

Mark Berndt started the presentation portion of the meeting with an explanation of how freight studies are typically structured. It is common to conduct freight studies taking a supply and demand approach, wherein the supply of, and demand upon, freight related infrastructure is analyzed. Tech Memo #1 provides a summary of the *demand analysis*. The demand analysis for Arizona was undertaken through three primary activities: 1) A review of Arizona's socio-economic trends; 2) an analysis of commodity origin/destination data, and; 3) stakeholder interviews. Mark indicated that Peter Ogonowski would present summary information about the socio-economic trends and commodity flow data. Mark would discuss the stakeholder outreach activities and Arno Hart of RNO Group would discuss key industry trends and the policy implications for Arizona.

Mark also discussed why freight has become an important element in public planning efforts: Historically, transportation was a necessary, but non-value added function of getting goods to market. Today transportation fused with real time information is being used as a strategic lever for competitive advantage. For instance, advanced information technology allows cutting-edge retailers to send real-time product stocking information to suppliers from the bar codes scanned as customers check-out. As a result, suppliers can keep just enough product on-hand, while still avoiding stock-outs, keeping customers satisfied while lowering inventory costs. Truck trailers and rail cars have become rolling warehouses - stationary inventory is a thing of the past, and businesses today seek to keep materials and products in constant flow. Businesses seek out environments where advanced supply chain management strategies can be executed, and therefore it is imperative that planning agencies understand this environment to support economic development.

## **Socio-economic Analysis and Commodity Profile for Arizona - Presentation Overview**

Peter Ogonowski presented the socio-economic and commodity flow sections of the presentation. During his presentation the following questions were raised by the TAC:

- Outbound traffic; how much is bound specifically for the ports of Los Angeles and Long Beach (LA/LB) for export as opposed to consumption in CA? This information may be important as ports become congested and if AZ is shipping to CA for export through the deepwater ports - gateways may change in the future, (e.g. proposed new ports in Mexico), would this change outbound traffic patterns?

The consultant team indicated that the commodity data did not provide that level of detail for locations beyond Arizona however one member of the consultant team just completed work on a Goods Movement Action Plan for the Southern California Association of Governments. The feeling was that commodities coming into Arizona from the Los Angeles region are largely from the Ports of LA/LB (also called the San Pedro Bay Ports) and that outbound traffic from Arizona to southern California is in large part being consumed in California. The real issue however is whether the development of new ports will significantly change traffic patterns. While future port locations may provide more opportunities to Arizona shippers, the proximity and scale of LA/LB will continue to provide strategic advantage for international exports from Arizona to Asian markets.

A question was also raised regarding empty container movements. With the exception of major markets where significant container traffic terminates, it is becoming increasingly difficult to obtain empty containers. To the extent that empty containers are not used in the major markets, ocean carriers and domestic container providers are reluctant to reposition empty containers even a moderate distance except at significant cost to the shipper. Should other ocean carriers follow Maersk Lines' consolidation of its inland intermodal service networks to fewer locations being served, the availability of containers at other than major markets will decrease further.

(Note: empty truck movements are included in the TRANSEARCH database purchased for AZ, so summary statistics on empty truck movements (but not empty containers) can be added to Tech Memo #1).

- How are flows from Mexico included in the data? Would like to see Mexico point-to-point movements summarized.

The consultant team explained that international flows from Canada and Mexico are included in the database at a state/province level of geography. Some additional summaries can be produced to further highlight these flows.

## **Stakeholder Outreach Presentation**

Mark Berndt presented the overview of stakeholder interviews and the comments/issues that arose from the effort. Overall, given the effort put into contacting firms - relatively few shippers contacted in the state agreed to be interviewed. Motor Carriers were much more willing. The lack of direct contacts among shippers was a significant hurdle to scheduling interviews.

### **Questions and Comments Regarding Stakeholder Presentation:**

- Would like to see a discussion of trends for short line railroads.
- Coal might be a more important commodity if the data showed pipeline moves.

The consultants indicated that pipeline movements were included in the database, but the reliability of pipeline data has become more questionable following heightened security following 911. Therefore, data regarding pipelines was not included in the summary.

- Slide #21: AZ Through Commodity Flows by Principal O/D showed Texas to Illinois, and California to California as principal pairs. The slide should have shown CA as a principal destination from TX, and IL a principal destination from CA. The correct text is:

<b><u>Origin</u></b>	<b><u>Destination</u></b>
• Texas	California
• California	Louisiana
• Texas	California
• California	Illinois
• Ohio	California

- A question was raised regarding the impact of petroleum prices and the consolidation of firms, why were those issues not mentioned by the carriers interviewed?

The consultants responded that the interview focused on transportation conditions in Arizona -- fluctuations in market conditions at a national level were unlikely to affect carrier operations in Arizona differently from the rest of the country.

- Would like to see weight added to the shipper and carrier responses where bottlenecks or issues were raised by more than one respondent.
- Several TAC members offered to provide contacts for additional companies. TAC members were asked to follow-up after the meeting with direct contacts for key businesses.
- A question was asked about whether “truck parking” came up specifically as an issue?

Truck parking was not raised specifically by carriers interviewed. Truck parking was raised by several MPO/COG officials. Recent research in another state suggests that where

and when to park is largely a truck driver decision or issue. When contacting carriers, interviews sought to speak with operation or terminal managers, which may explain why parking issues didn't come up specifically.

- Will city logistics be examined are part of the study? What about hazardous materials movements through urban areas?

The consultant team indicated that this effort was intended to be a high-level look at statewide planning with regard to freight, and that each urban area is likely to have specific freight needs. Urban freight analyses would need to be raised through regional studies.

### **Key Industry Issues and Trends**

Arno Hart of the RNO Group presented on five key trends highlighted by the data:

- 1) **POPULATION GROWTH** - Three ways that current and future growth in population will impact Arizona with regard to freight movements:
  - **Specific commodity movements will grow faster than others;** food products, retail trade and construction. The implication from this growth is that population centers in Arizona will see an increased demand for warehouse distribution staging and an overall growth in commercial traffic levels.
  - **A linear development pattern is emerging along the corridors connecting Tucson-Phoenix and area north.** The resulting implication is that there is a need through long range planning efforts to define the freight roles that will be played for different components of the highway network.
  - **Mode reliance** – The previous two implications will further emphasize inter-urban traffic patterns, resulting in higher growth of urban truck traffic
- 2) **FREIGHT SERVICE LEVELS** - Freight transport service levels are deteriorating in some markets and for some commodities due to shifting business models. Historically, railroads also put considerable effort into building and distributing loads at either end of long haul moves. However, due to market changes and declining capacity on mainline networks, railroads have begun to focus on traffic that allows them to build and/or discharge loads at a single point or node. Class I Railroads receive their highest margins from moving large quantities of commodities point to point over long distances as such moves have the lowest cost due to minimal handling at origin and destination. Examples of this type of traffic are coal movements to a large utility or port, and container movements from a port to a large terminal. As a result, the Class I railroads are de-emphasizing certain domestic carload markets that require considerable re-handling of freight cars or markets that are considered short hauls. The result is that railroads are now focusing on markets that generate whole trains from a single loading point, and travel a long distance to a single unloading point. The large railroads are placing emphasis coal and container traffic through major port gateways. This business model appears to be working as railroads are doing better financially in recent years. The implication for Arizona is:
  - **Arizona is likely to see decreases in service levels from Class I railroads** for traditional domestic sectors such as copper mining (resurging) and produce.

- 3) **CONGESTED CORRIDORS** – Congestion has been growing on regional corridors leading to the state and serving major urban areas in the state. As noted in the commodity analysis a significant portion of truck and rail freight traveling in Arizona is "bridge traffic" moving across Arizona on corridors from origins outside the state to destinations outside the state - this bridge traffic will continue to increase in the future. The implications for Arizona are:
- **Additional rail investment in mainlines in Arizona by the railroads may not preserve future service levels for Arizona businesses:** Arizona's rail corridors will continue to become more congested. The increases in congestion are due in part to: a) Increasing amounts of freight moving through the San Pedro Ports (i.e. The Port Southern California) from the general increase in exports; b) Ocean carriers who favor the San Pedro Ports as load centers; and, c) Increasing rail traffic from Mexico that flows through the state.
  - **Continued growth in container activity in Southern California Ports will also increase congestion along major interstate corridors:** Interstate highway routes such as the I-10 and the I-17 will see increased congestion that may impact service levels for highway based freight.
- 4) **DISTRIBUTION CENTERS AND STAGING AREAS** – The greater PHX/TUC market will be increasingly viewed as a single consumer area. By 2020, the PHX/TUC area will be as big as the Los Angeles market is now. Currently the Southern California market consumes about one-quarter of the freight entering the San Pedro ports in containers. The implication for Arizona is that, as the consumption power of the primary urban areas grow there will be a need to designate and encourage development patterns that facilitate efficiency in freight transportation systems:
- **Increasingly the Arizona market will be viewed by shippers and freight handlers as a single market.** As discussed earlier, rail carriers (as well as retail shippers and distributors) are seeking out opportunities to build loads with minimal collection activities. As Arizona's populations centers expand, the economies of scale suggest an increased ability to build loads (whole truck loads and train loads) specific to PHX/TUC market.
  - **Examine the development of an intermodal load center** to serve this large market. Such a facility must be able to handle longer trains of 8000 feet or more.
  - **Plan for the development of designated warehouse and freight staging areas** internal to the urban areas that will build density and shift freight to specifically designed corridors
  - **Work with local municipalities and counties** to develop appropriate land use strategies and guidelines that support freight and logistics activities without significant impacts on residential neighborhoods and traffic.
- 5) **STAKEHOLDERS** - As the amount of freight has increased so has the level of activism among the general public and special interest groups regarding freight issues. The field of potential stakeholders is increasing and a broader range of stakeholders are involved in defining policies, programs and investments. The implication then is:
- **It will be in the best interests of Arizona to coordinate freight related planning activities more aggressively across all levels of government;** state, regional and local.

Government agencies will also need to coordinate planning and investment activities with a wide array of stakeholders, especially stakeholders from the private sector.

### Questions and Comments Regarding Trends and Issues

- Other comments regarding railroads: Rail line abandonment's result in more truck traffic. Is this in part due to most federal funding going to the Federal Highway Administration and not the Federal Railroad Administration? Why don't we invest more in railroads as a strategy for reducing highway traffic?

The consultant's responded that even though the railroads pay fuel taxes, they have not generally supported putting their taxes into dedicated funds that would go back into infrastructure investment as they want to direct their own investment rather than have investment directed by a government body. As private companies they have opposed government participation such as public private partnerships for fear of opening themselves up to re-regulation or potentially forcing open track policies - wherein they would be forced to allow others (e.g. shortlines) to access their rail lines. Line abandonment has resulted primarily from the more focused business model previously discussed.

- If the trend is for rail service to decline in Arizona, why do UP & BNSF have plans to double & triple track mainlines across Arizona?

It was the consultant's opinion that plans for increasing track capacity through Arizona had little to do with serving Arizona markets, and much to do with handling additional through traffic from the San Pedro Ports, and possibly shifting some traffic from more congested northern tier lines to southern tier lines.

- A suggestion was made that the report should also report commodity flows in ton miles.

The consultants explained that truck ton miles was not included in the data purchased, and that producing ton-miles would involve a modeling effort that is likely beyond the scope of the current study, but agreed to investigate the issue further.

- When the Panama Canal expands in 2012, will it significantly change the traffic flows?

In the opinion of the consultant team, while it will impact flows through Arizona it will not have large significant impacts on the level of traffic coming from LA/LB. The same holds for the potential of future Mexican port developments. The Tech Memo presented a map showing that the demand for container lifts at LA/LB is projected to significantly outpace available capacity. So, while these other developments may lessen congestion at the Port of LA/LB they are unlikely to lessen demand below available capacity.

- A question was raised about transloading of freight in Southern Arizona and that it is resulting in higher truck weights.

Response: Federal policy governs truck weight limits on the Interstate and National Network Highways. While international containers can be permitted as non-divisible loads



before they are opened - limits are 80,000 lbs. gross vehicle weight (GVW) on the federal system. There are a handful of states in the U.S. that allow more than 80,000 lbs GVW due to grandfather provisions in federal law - but Arizona is not one of them. The consultants are currently scheduling a meeting with state enforcement officials however, to learn more about regulatory issues raised by carriers. This issue will be explored as well.

- Comment: The total value figure for commodities should be checked.

(The total value of commodity movements stated in the Tech Memo and Presentation was in error, based on the reporting units. All value figures will be re-checked.)

- Would like to see a summary analysis of intra-state county to county movements included in the data summaries.
- Comment: Freight car classification yard in Pichaco is very controversial. BNSF looking at doing new yard in Surprise/Wittman

Additional information about rail yards will be provided in Tech Memo #2

### **Wrap-up and Final Comments**

- The Next TAC meeting is scheduled for Tuesday, December 11, from 10:00 -1:00.
- Additional comments on Tech Memo #1 must be submitted to Dianne Kresich by this Friday, October 12.

The meeting was adjourned at 3:30.